# **96PH** pH/ORP Transmitter

- Large LCD display
- Friendly interface
- Robust enclosure
- Easy to use menus
- Multiple mounting methods
- Two-Wire loop power



LECOL 96 series was designed with the user in mind.

Measurement information is easily read on the large liquid crystal display (LCD).

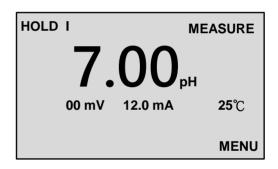
The graphic LCD screen can display multiple parameters simultaneously, including pH value, input mV signal, temperature, mA output signal, and smart function keys.

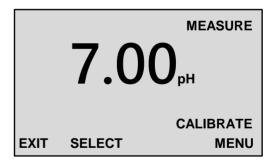
96 series transmitter's keypad interface is user friendly. The smart function keys can be used to navigate to three submenus: "calibrate", "output", and "configure".

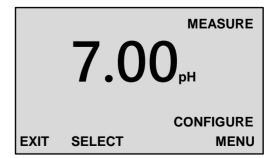
The "calibrate" submenu is for sensor and output signal calibration.

During calibration, output signals can be paused in "Output".

All measuring parameters can be set through "Configure".









#### **Enclosure**

The powder coated alloy housing meets NEMA 4X and IP65 requirements for use in harsh, industrial environments.

The metal housing suppresses noise and prevents the interference caused by electromagnetic environment.

### **Mounting Methods**

Pipe, wall, and panel mounting options are available to provide flexibility in different installation scenarios.



#### Calibration

Calibration is the process of ensuring that the analyzer will measure accurately. It can conduct by using lab instruments or standard liquid buffer solutions.

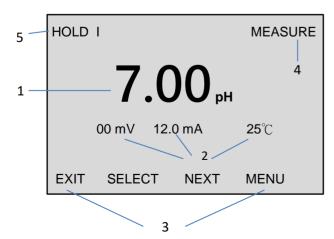
The 96PH transmitter provides two modes for calibration: one-point and two-point.

- One-point calibration mode can adjust the offset to the expected value of the measured solution.
- Two-point calibration mode can adjust the offset and slope, allowing for a more accurate measurement.

The standard calibration usually uses two-point calibration first and conducts one-point calibration to make fine adjustments to improve the accuracy.

The 96PH transmitter allows the user to hold the analog output to a fixed value during calibration to avoid process upset. To ensure the best measurement accuracy, please calibrate when the sensor is first used. Moreover, regular calibration is the way to keep the sensor performing with highest accuracy. The 96PH transmitter allows calibration using a grab sample of the process liquid or a standard buffer solution depending upon the process requirements.

# Main screen displays



- 1. **Main display** Display of primary measurement
- 2. **Minor display** Additional measurements
- 3. **Function keys** Select submenus:

Calibrate Output

Configure

- 4. Current mode Mode in use
- 5. **Hold Output** Manual hold output at a specific value.





### Selection Keys

There are four selection keys under the screen - EXIT, SELECT, NEXT, MENU.

Use the selection keys to:

1. EXIT: To guit, cancel the function

2. SELECT: To select measurement function

3. NEXT: To continue the setting process

4. MENU: To select different measurement

> modes: calibration mode, output mode, and configuration mode









# **Specifications**

Type

Two-Wire pH/ORP transmitter

Display

240\*128 dots graphic LCD display

Supply voltage

12~24 VDC, loop power

Power consumption

0.6W Maximum

Input range

: 0~14 pH pΗ **ORP** : +/- 1999 mV Temperature: 0 ~ 100°C

**Display Resolution** 

Hq : 0.01 pH **ORP** : 1 mV Temperature: 1°C

Accuracy

+/- 0.01 pH

+/- 1 mV

+/- 1 °C

+/- 0.02 mA

Temperature compensation

Manual, Automatic, Auto solution

Temperature sensor types

3kΩ Balco / PT100

Analog output

Isolated 4~20mA current output

LECOL

Configurable pH/ORP range

pH : 0.00 ~ 14.00 pH ORP: -1999 ~ 1999 mV

Minimum span

pH : 1.00 pH ORP: 200 mV

Input impedance

 $> 10^{12} \Omega$ 

Environmental

Operating temperature: -10 ~ 50 °C Storage temperature : -20 ~ 70 °C Operating humidity : 95% RH Storage humidity : 95% RH

Enclosure

NEMA 4X and IP65

Aluminum alloy with polyester powder coating

Mounting

Panel, wall, pipe, and pipe mounting with

weather shield

Certification

Low Voltage Directive 2014/35/EU

EN 61010-1:2010

**Electromagnetic Compatibility Directive** 

2014/30/EU EN 61326-1:2013 CE marked **( €** 

**Dimensions** 

: 144\*144\*177mm (H\*W\*D) Size

Panel cut: 135\*135(±0.2) mm

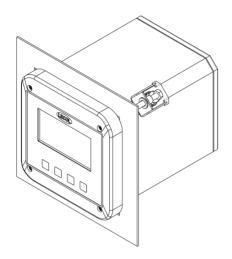
Weight

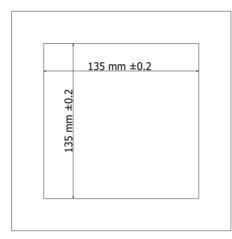
2.2 kg

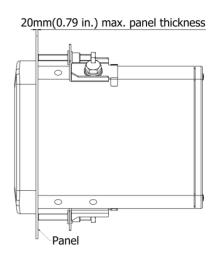
3 kg with pipe mounting kits

# **Mounting types**

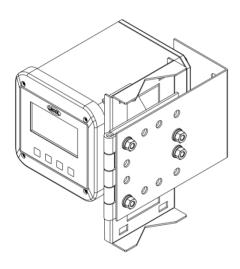
### Panel mounting

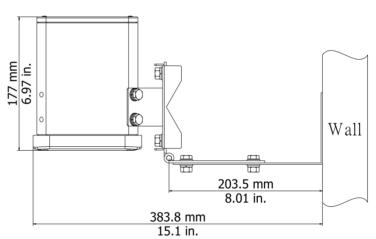




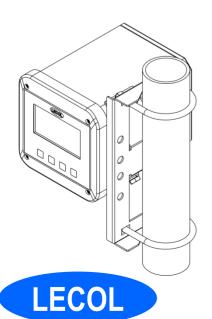


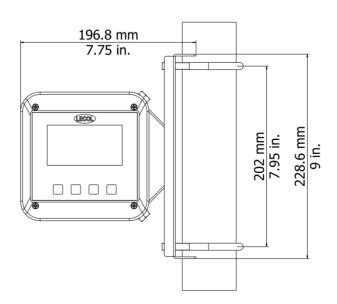
Wall mounting



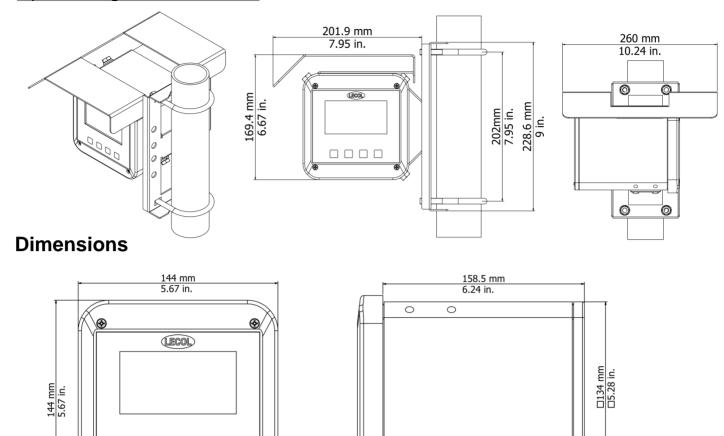


Pipe mounting

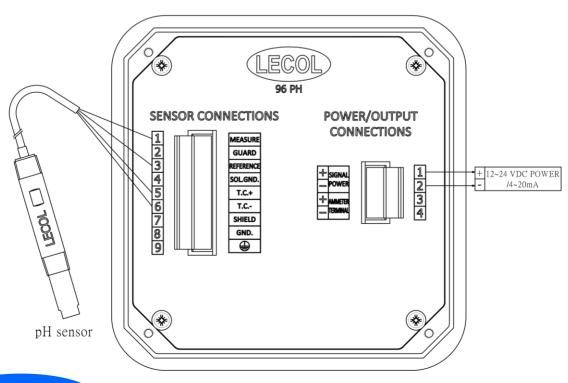




#### Pipe mounting with weather shield



# **Electrical & sensor wiring**



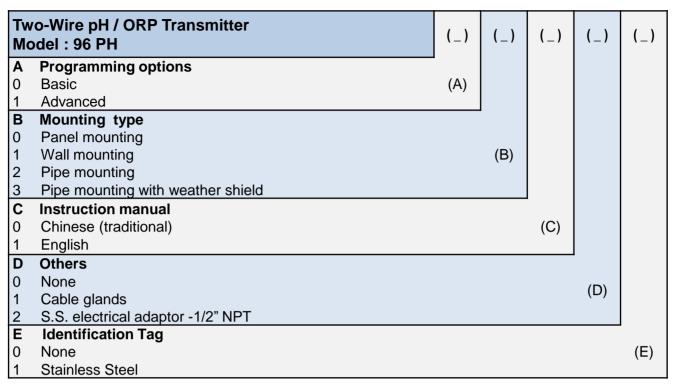
0

0

177 mm 6.97 in.



# **Ordering information**



<sup>\*</sup>LECOL reserve the right to make technical changes or modify the contents of this document without prior notice.



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